

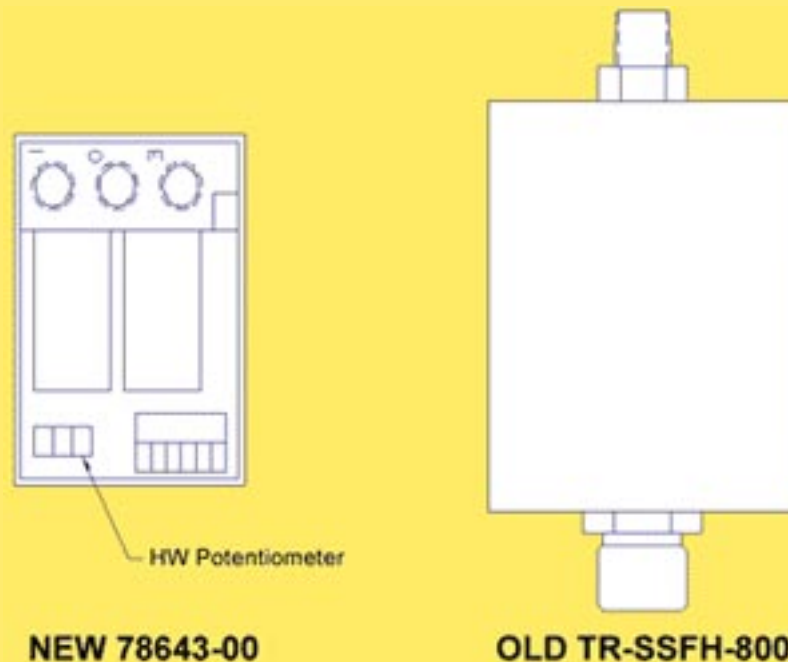
## Service Bulletin

**Bulletin No. 03-06**  
**February 24, 2006**

**To: ITW Ransburg and ITW Automotive Finishing Distributors**  
**Subject: Transducer Oscillating Issues on DynaFlow (77376), EZ Flow (77357), 2k-220 (BLAL5000) & 2k-880 (TR200814-1)**

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In November of 2002 manufacturing started using a new pressure transducer (P/N 78643-00) in ITW Ransburg 2K equipment (DynaFlow P/N 77376, 2K-220 P/N LBAL5000, 2K-880 P/N TR-200814-1 and EZ Flow P/N 77357). The new pressure transducer offers increased performance because of its' higher airflow capability. Because of this higher airflow capability, oscillations can occur if the tubing restricts the air flow or is too short. These oscillations can lead to improper operation and/or premature failure of the transducer and attached gauges. Please reference the Figure 1 below to determine if a 2k unit has an old style (P/N TR-SSEH-800) or the new style (P/N 78643-00) transducer.

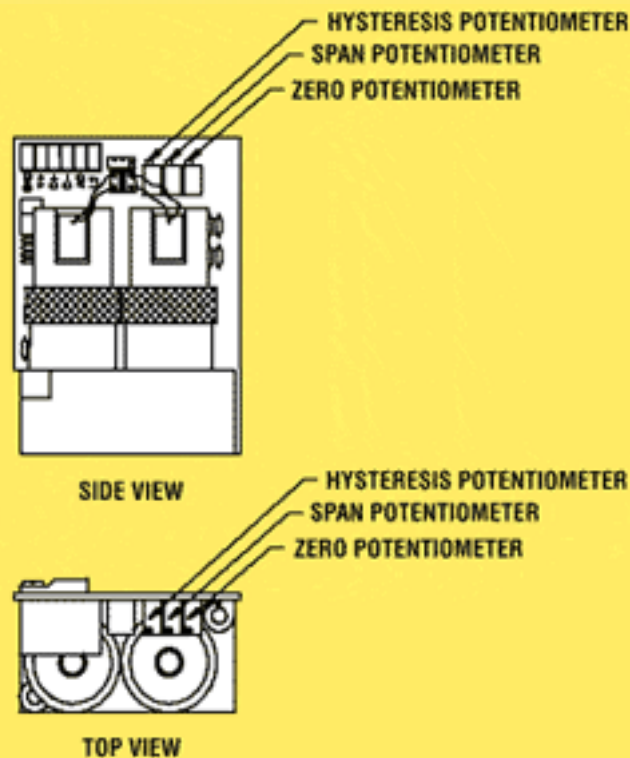


To prevent these oscillations and improve performance on units employing the new transducer, the factory supplied 5/32 OD (0.106 ID) tube and fittings must be 1/4 OD (0.170 ID) from the transducer output to the input of the material regulator valve (MVR). This tubing must be at least 15' in length. Shorter lengths will result in improper transducer operation. After the 15' minimum the tube should be cut as short as possible to suit the application. Kit A10462-00 contains the necessary tubing and fittings to make this change for two (2) transducers. All units shipped from the factory from this date forward, will incorporate this change.

For optimal performance the following adjustment is also recommended:

### 76843 Hysteresis Adjustment

1. The 78643 Transducer has an adjustable hysteresis window, which allows one to tune the unit to the application for the best resolution.
2. To make the adjustment, first verify there are no downstream leaks.
3. Next establish a pressure of 100 psi at the MVR valve of interest by placing the unit in clean or calibrate mode. It is not necessary to flow any fluid. Note - main supply air to the E-Z Flow must be 105 psi or greater to get oscillation as described in step 6. If main supply pressure is less than 105 psi, perform all steps below. Other wise, jump to step 6. Operation with main supply pressure lower than 90 psi may degrade overall system performance.
4. Remove unit from clean or calibrate mode. Access the program loop and change MVR Low for the MVR Valve of interest to 80 psi or a number that is 10 psi lower than the main air supply. Note that MVR Low cannot be set higher than 80 psi. Record the previous MVR Low value for use in step 10.
5. Put the unit into Run Mode. Do not spray any fluid. The MVR gauge should go to the new MVR Low setting established in 4. above.
6. Turn the hysteresis potentiometer "HW" (see Figure 2 for location) counter-clockwise until the transducer begins to oscillate steadily.
7. Adjust the potentiometer "HW" clockwise until the oscillation stops. Then turn it one more turn clockwise. DO NOT ADJUST the ZERO and SPAN potentiometers as this will adversely affect the unit's calibration.



9. Remove the unit from Clean, Calibrate or Run Mode.
10. If the MVR Low value was changed in step 4., change it back to its previous value, before operating the system.